# AMENDMENT NO. 3 JULY 2021

# TO

# IS 1571 : 2018 AVIATION TURBINE FUELS, KEROSINE TYPE, JET-A-1 — SPECIFICATION

*( Tenth Revision )*

(*Cover page* 2, *Foreword*, *Para* 3) — Insert the following after the last line:

'This draft Amendment No. 3 is being issued in order to align the specification with DEF STAN 91-091 (Issue 12, 14 September 2020) and 'AFQRJOS Issue 32 – Nov 2020'

[ *Page* 5, *Table* 1, *Sl no*. i, c) *and* d) ] — Substitute the following for the existing Sl No. i, c) and d):

| **Sl No.** | **Characteristic** | **Requirement** | | **Method of Test, Ref to [P:] of IS 1448/ASTM/IP/ISO** |
|---|---|---|---|---|
| (1) | (2) | (3) | | (4) |
| | c) Particulate contamination, at point of manufacture, mg/l, *Max* | 1.0[2] | | ASTM D 5452*/IP 423 |
| | *OR* | | | |
| | d) Particulate, at point of manufacture, cumulative channel particle counts, | Individual Channel counts | ISO Code[3] | IP 565* or IP 577* or D7619 |
| | 1) ≥ 4 µm(c) | Report | 19, *Max* | |
| | 2) ≥ 6 µm(c) | Report | 17, *Max* | |
| | 3) ≥ 14 µm(c) | Report | 14, *Max* | |
| | 4) ≥ 21 µm(c) | Report | Report | |
| | 5) ≥ 25 µm(c) | Report | Report | |
| | 6) ≥ 30 µm(c) | Report | 13, *Max* | |

[*Page* 5, *Table* 1, *Sl no*. iii, b) ] — Substitute the following for the existing Sl No. iii, b):

| Sl No. | Characteristic | Requirement | Method of Test, Ref to [P:] of IS 1448/ASTM/IP/ISO |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| | iii) Volatitlity | | |
| | b) Flash point (Abel), °C, *Min* | 38 | [P : 20]/ISO 13736*/IP 170 |

(*Page* 6, *Table* 1, *Notes* 3) — Substitute the following for the existing Note 3:

'Both number of particles and number of particles as a scale number as defined under Table 1 of ISO 4406 : 1999 shall be reported. If Channel counts/ISO Code exceed the limits stated, Annex B of IP 565 or Annex B of IP 577 or Annex A2 of D7619 may be applied to eliminate trace free water, and cleanliness re-determined. In such cases, results before and after application of Annex B shall be reported. To meet the requirements of this standard the limits of either test c or d shall be met.'

(*Page* 6, *Table* 1, *Note* 4) — Substitute the following for the existing Note 4:

'Defence requirements to be met at 22 percent by volume, *maximum*. Typically, the ASTM D1319 and IP156 are specified as the required test method for aromatics measurement. In addition, recently delivered supplies of the product gel containing the dye with lot numbers 3000000975, 3000000976, 3000000977, 3000000978, 3000000979 and 3000000980 were produced with a substitute dye that is unfortunately not suitable and will not provide accurate measurements of aromatic concentration if utilised. Given the above, if ASTM D1319/IP156 is used for analysis of Aromatics, the lot number of the gel used shall be reported on the test certificate. A ruggedness study has shown that subsequent batches of the dye, with a lot number of 3000000983 or greater, yield results comparable with the lots prior to 3000000975. An inter-laboratory study (ILS) is expected to corroborate these results.

When the aromatic level is needed to be determined, Jet A-1 fuel will only meet the aviation fuel operating limitations of aircraft certificated to operate on Jet A-1 fuel and the requirements of IS 1571 if:

a) the fuel has been tested for aromatics concentration in accordance with P : 23/ASTM D1319/IP156 with a dye other than from lot numbers 3000000975 through 3000000982.

or

b) the fuel has been tested for aromatics concentration in accordance with the alternative test methods ASTM D6379/IP436.

No other alternative test method, or method of deriving the aromatic content, is acceptable.'

(*Page* 10, Annex C, **C-2**) — Substitute the following for the existing **C-2**:

**C-2** A significant reduction in Saybolt Colour rating (darkening) from the original certificate of quality for the batch would usually be cause for investigation as follows:

| Initial Saybolt Colour at Point of Manufacture | Significant Reduction |
|---|---|
| >25 | >8 |
| ≤25 but ≥15 | >5 |
| <15 | >3 |

(PCD 03)

Publication Unit, BIS, New Delhi, India